

on the scan. In certain embodiments the fields created by either of these techniques could be used to create metadata which would be associated with the ad.

The advertisement so created, along with any metadata, could be sent from the software to a content provider that posted classified advertisements on behalf of users. This could be done, for example, using a SOAP connection between a software module of the advertisement-creating software and a software module running on one or more computers at the content provider. The content provider could then take steps analogous to those described above to request that the classified advertisement be transmitted over the wireless link.

Terminals could use the filtering functionality described above to search for certain advertisements. For example, a user could specify that the terminal bring to his attention all advertisements selling a used Honda Civic for less than \$2000. The filtering module of the terminal could comply with the request by monitoring the metadata and/or content of incoming classified advertisements in a manner analogous to that described above.

Chat Service

Chat messages could be distributed in a manner similar to that described above with reference to classified advertisements. Thus according to one embodiment of such a service, reception terminals could have software that allowed their users to construct chat messages. Such chat messages could be messages starting a new discussion threads or messages responding to already-posted messages and/or already-established discussion threads.

The software could allow users to select either global distribution or distribution to a particular network area. The software might also ensure that that constructed chat message be in a form compatible with the above-described filtering functionality of the terminal. One way of doing this would be to require the user creating a chat message to fill in certain fields describing the message. For example, the user might be required to specify an "message type" field by

selecting from choices such as “City Nightlife,” “High School Homework-Help,” “Macintosh OS X,” and the like. Alternately, the software might scan a message written free-form by the user for certain keywords, and automatically populate the fields based on the scan. In certain embodiments the fields created by either of these techniques could be used to create metadata which would be associated with the message.

The message so created, along with any metadata, could be sent from the software to a content provider that posted messages on behalf of users. This could be done, for example, using a SOAP connection between a software module of the message-creating software and a software module running on one or more computers at the content provider. The content provider could then take steps analogous to those described above to request that the chat message be transmitted over the wireless link.

Terminals could use the filtering functionality described above to search for certain messages. For example, a user could specify that the terminal bring to his attention all chat messages concerning statistical analysis using Excel for OS X. The filtering module of the terminal could comply with the request by monitoring the metadata and/or content of incoming chat messages in a manner analogous to that described above.

As alluded to above, a user receiving a message could use a similar procedure to respond to that message. In certain embodiments, when a message is created to respond to a posted message, the software might take steps to ensure that some or all of the metadata associated with the response message matches the metadata of the message to which the response is being made.

System Distribution and Scalability

As noted above, Fig. 8 shows the DDS in terms of various programmatic modules.

According to the present invention, by choosing the number of such programmatic modules in operation, the number of computers upon which the modules run, and the physical location at which those computers are located, a scalable DDS may be provided. This concept will now be described by way of example with reference to Fig. 12. Communication between modules could be achieved using techniques such as SOAP, RMI, and Apple Computer's Distributed Objects.

As alluded to above, an embodiment of the DDS of the present invention includes several network areas. For network areas 2 and 3 of fig. 12, the local storage modules (1201 and 1203 respectively) and local caster modules (1205 and 1207 respectively) operate on general purpose computers located at DDS headquarters 1200. On the other hand, for network area 1 the local storage module 1209 and local caster module 1211 operate on general purpose computers located near the network area. In certain embodiments, also operating on general purpose computers located near network area 1 might be a gatekeeper module, upload store module and/or preprocessing module. Such functionality could allow uploads meant for distribution only to local area 1 to be uploaded directly to the general purpose computers located near network area 1 rather than to the general purpose computers of DDS headquarters.

Turning to broker modules, we see that the broker module for network area 3 (1227) operates on one or more general purpose computers located at DDS headquarters while the broker modules for network areas 1 and 2 (1223 and 1225) operate on general purpose computers located near their respective network areas. Furthermore, as shown in fig. 12, network areas 1 and 2 each have a locally-located clone (1213 and 1215 respectively) of the scheduling intelligence module and its associated storage. The associated stores of the clones may be made to reflect the associated store of main scheduling intelligence module 1217 of DDS headquarters by use of replicated server techniques known in the art. For example, the main scheduling